

NEW SPECIES OF TACHINIDAE FROM MEXICO
(DIPTERA)¹

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The following descriptions of new species of parasitic flies are based upon Mexican material acquired mainly from collections made by Drs. W. G. Downs, M. R. Wheeler and F. A. Cowan. Types of the new species are retained by permission in my collection.

Genus *Microphthalma* Macquart

Microphthalma Macquart, Dipt. Exot., 2, pt. 3, 1843, 241 type, *Tachina disjuncta* Wiedemann (as *nigra*, new species).—Coquillett, Rev. Tach., 1897, 138.—Curran, Ent. News, 36, 1925, 15–18.—Aldrich, Proc. U. S. N. M. 69, 1926, 1–8.

Microphthalma ascita n. sp.

Traces to *cuzana* Townsend in Aldrich's key (loc. cit.), but at once distinguished by the absence of ocellars, wholly black legs, third antennal segment reddish at base, etc.

Male.—Front at vertex 0.30 of head width, nearly equibroad on upper third thence widening rapidly forward; head black only the broad cheek groove and parafacial pale or reddish in ground color; parafrontal with dense yellowish gray pollen extending to vertex; frontalia reddish to brown wider than parafrontal; frontals about seven in a row, one below antennal base, the upper pair stoutish and decussate; no orbitals; outer vertical about half as long as inner; parafacial subequal facial width, beset with scattered short black hairs; antenna extending a little over halfway to vibrissae, basal segments reddish yellow, third concolorous nearly to middle thence blackish and about one-half longer than second; arista short, black, pubescent, proximal segments small; vibrissae approximated, strongly narrowed epistoma unusually produced downward and exceeding clypeal length; proboscis short, labella large; palpus slender but rather short, yellow; cheek subequal eye height.

Thorax black, with dense cinereous pollen; notum marked with four narrow dark vittae all interrupted at suture and fading out before base of scutellum; dorsocentral 3, 3; acrostichal 2, 2 (none immediately before or behind suture); presutural 2 (both strong); intraalar 2 (one next behind suture vestigial); sternopleural 3; anterior spiracle fringed with deep brownish to black hairs. Legs

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rather slender and moderately elongate; mid tibia with two antero-dorsal bristles; claws and pulvilli elongate. Wing subhyaline; veins reddish to brown, third with 3 to 5 hairs near base; first posterior cell open far before wing tip; cubitus with a long stump; costal spine long; epaulet black; calypters opaque white.

Abdomen black apex usually with an apparent reddish tinge in ground color, last three segments gray pollinose; apical third of intermediate segments darker but with thin brown pollen apparent in a flat rear view, anal segment subshiny and strongly bristled on apical half above; one pair of median marginals on second segment and third with a complete marginal row; genital forceps fused, triangular in rear view, tapering to a shiny pointed beak; accessory process slender or fingerlike beyond base; fifth sternite moderately exposed, with a wide V-shaped apical excision.

Female.—Vertex 0.36 of head width, front gradually widening to antennal base; parafacial yellow to golden pollinose, this color extending on upper part of parafacial; two stout proclinate orbitals; abdomen shorter and broader than in male, anal segment reddish yellow from discal row to apex; genitalia red, retracted; claws and pulvilli shorter than last tarsal segment.

Length, 7–9.5 mm.

Holotype male and allotype female, Acatlipa, Morelos, Mexico, September 16, 1950 (W. G. Downs). Paratypes: 3 males, same data as type.

Microphthalma pedalis n. sp.

Similar to the preceding species except as follows:

Male.—Head pollen wholly cinereous; antenna longer and reaching lower third of face, third segment slightly over twice length of second; epistoma shorter and more distinctly widened below; vertex 0.34 of head width; pulvilli about one-half as long as last tarsal segment; abdomen wholly black in ground color, apical third or more of last three segments subshining in direct view; hypopygium wholly black.

Length, 10 mm. Female unknown.

Holotype: Chipinque, Nuevo Leon, 1440 meters, September 22, 1950 (L. Navarro). Paratype: Male, same data as type.

Genus *Euhystricia* Townsend

Euhystricia Townsend, Ins. Insc. Mens., 2, 1914, 84 (type, *E. nigra* new species); Manual of Myiology, Part 8, 1939, 26–27.

Euhystricia cussiliris n. sp.

Differs from the description of *E. nigra* in having the haustellum distinctly shorter than one-half the head height; palpi much larger and subequal length of third antennal segment; scutellum with only three laterals; abdomen thinly brown pollinose on deep red ground color becoming darker along median line above. Other differences are listed below.

Male.—Vertex 0.21 of head width, front hardly widening on upper third thence rapidly so into facial angle; parafrontal plumbeous; parafacial, clypeus, cheek and occiput with dense gray to silvery pollen; frontalia deep brown, at middle subequal parafrontal width; ocellars strong, proclinate; inner verticals long, decussate; four or five frontals beneath antennal base; antenna black, third segment subequal parafacial width and a little over twice length of second; arista micro pubescent, thickened on basal two-fifths, second segment about twice as long as wide; parafacial bare, about one-third clypeal width; vibrissae on level with front edge of oral margin, which is only moderately produced; facialia with three or four bristly hairs on lower extremity; eyes densely pilose; cheek nearly two-fifths eye height; occiput thickly pale-haired.

Thorax black, thinly gray pollinose, dorsal vittae indistinct. Chaetotaxy: humeral 5-6; notopleural 2; presutural 2 (inner one weak); supraalar 3; intraalar 3; dorsocentral 3, 3; acrostichal 3, 3; postalar 3; sternopleural 3; pteropleural 1 (larger than sternopleural); scutellum reddish in ground color, thickly beset with slender suberect spinelike macrochaetae, with 1 pair of longer curved discals and 3 strong laterals well differentiated; propleuron bare. Legs black, tibiae obscurely reddish, claws and pulvilli elongate. Wing subhyaline; costal spine not developed; third vein setulose nearly halfway to small cross vein; first posterior cell open well before wing tip; cubitulus without a stump or fold; calypters black, bare above.

Abdomen short, wider than thorax, convex upper surface thickly beset with erect bristles and hairs; segments two to four each with a well differentiated marginal row besides a complete discal row on last two; second segment with two pairs of irregularly spaced median discals and first bearing two or three pairs of slender erect median marginals; hypopygium subshining blackish, moderately large; forceps united, free portion gently bowed, tapering to sharp tip; accessory process bladeliike, with anterior apical extremity produced as a minute hook, black-haired on outer side; fifth sternite

black, V-shaped apical excision not extending to middle, lobes small, beset with long fine black hairs.

Length, 12 mm. Female unknown.

Holotype: Rio Frio, Mex., Mexico, September 3, 1947 (F. A. Cowan and M. R. Wheeler).

Genus *Peleteria* Robineau-Desvoidy

Peleteria Robineau-Desvoidy, Essai Myodaries, 1830, 39 (type, *P. abdominalis* new species).—Curran, Trans. Royal Soc. Can., Sec. 5, 1925, 225–57.—Townsend, Manual of Myiology, Pt. 8, 1939, 54–55.

Peleteria carnata n. sp.

A large and very robust species with thorax densely pollinose above and abdomen wholly shining black, only the anal segment with pollen at sides above.

Female.—Front at vertex 0.42 of head width; parafrontal subgolden to vertex, parafacial and cheek with somewhat paler yellowish white pollen on pale background; frontalia light reddish yellow, much narrower than parafrontal; three proclinate orbitals; antenna red basally, third segment black, broadly rounded above and obliquely tapering apically, about two-thirds as long as second segment; basal segments of arista moderately elongate, the second slightly longer than first; palpus very slender to tip, yellow, about as long as haustellum; parafacial broad, sparsely clothed with black hairs and two stout bristles near eye margin below; cheek with sparse longish black hairs, one-half eye height; back of head clothed with dense pale yellow pile.

Thorax black, with rather heavy yellowish gray pollen; mesonotal vittae narrow, outer pair broadly interrupted at the suture and inner ones stopping shortly behind same; acrostichal 3, 3; dorsocentral 4, 4; sternopleural 2, 1; pteropleural 2 (large); scutellum obscurely reddish apically, with 4 lateral, 1 decussate apical, 1 preapical and numerous erect discal bristles.

Legs black; intermediate segments of front tarsus distinctly widened and flattened; middle tibia with a row of about six stout bristles on outer front side; claws and pulvilli moderately elongated but shorter than last tarsal segment.

Wing gray hyaline; first posterior cell open far before wing tip; cubitus subacute, with a distinct fold; hind cross vein in plane of apical and joining fourth at less than one-third the distance from cubitus to small cross vein; last section of fifth vein about two-

fifths as long as the preceding; calypter white; epaulet black.

Abdomen short, broad ovate, wholly shining black with thin and somewhat changeable subsilvery pollen on outer margin of anal segment beyond the basal border; second segment with one pair of median marginals, third and fourth each with a marginal row besides a discal row on last; sternites exposed apically and beset with stout bristles. Male unknown.

Length, 14–15 mm.

Holotype female, Zamora, Mich., Mexico, August 27, 1947 (F. A. Cowan and M. R. Wheeler). Paratype: 1 female, same data as type.

Genus *Juriniopsis* Townsend

Juriniopsis Townsend, Ins. Insc. Mens., 4, 1916, 73 (type *J. adusta* Wulp, equals *floridensis* Townsend).

Juriniopsis lampuris n. sp.

The smaller less robust build and shining blue-black abdomen readily distinguish this species from both *J. adusta* and *J. aurifrons*.

Male.—Front at vertex 0.34 of head width; parafrontal yellowish gray pollinose to vertex; frontalia reddish brown, moderately pollinose, narrower than one parafrontal on entire length; frontal bristles stout, in two rows anteriorly diverging widely on parafacial below antennal base; ocellars and proclinate orbitals absent; two strong verticals, inner pair decussate; first and second antennal segment reddish, third largely blackish, strongly convex on anterior edge and subequal length of second; arista finely pubescent, thickened and evenly tapered to middle, second segment about three times longer than wide; parafacial a little narrower than clypeus, silvery, outer half with black hairs becoming bristly below; cheek silvery, sparsely black-haired, nearly one-half eye height; proboscis approximating head height, haustellum moderately slender, subequal length of palpus; latter yellow, clavate; occiput densely clothed with pale yellowish pile.

Thorax black at most lightly dusted with grayish pollen, notum subshining; scutellum obscurely reddish brown, with 5 unequal lateral bristles and 2 pairs of apical spines, entire disc covered with short, erect spinose macrochaetae and 1 longer depressed pair of discal bristles; propleuron black setose. Legs black, tibiae brownish; claws and pulvilli strongly elongate and subequal combined length of last two tarsal segments; hind coxa pilose on posterior apical margin. Wing slightly infuscated becoming much darker or blackish at base; veins brown, third setose near base and the first

sometimes with 1 or 2 adventitious hairs before apex; first posterior cell open far before wing tip; costal spine vestigial; epaulet and subepaulet reddish; calypter black.

Abdomen polished blue-black; second segment with 3 to 5 marginal pairs of unequal spinelike macrochaetae, third with a complete marginal row and fourth beset with shorter spinelike bristles on apical half above; hypopygium small, retracted in repose; forceps rather short, united base convex and thickly haired behind, tapering apical half divided but not divergent; apex of accessory process curved inward and rather broadly excised, the anterior fingerlike lobe longer than posterior; sternites widely exposed and beset with spiny bristles.

Female.—Vertex 0.37 of head width; two stout proclinate orbitals; frontalia reddish, dusted with white pollen, parafrontal yellowish as in male; fore tarsi not conspicuously flattened or widened; claws and pulvilli shorter than apical tarsal segment; genitalia black, retracted.

Length, 13.5 mm.

Holotype male and allotype female, Acatlipa, Morelos, Mexico, June 2 and July 29, 1950 (W. G. Downs). Paratype: 1 male, same locality and collector, October 4, 1949.

Genus *Spathidexia* Townsend

Spathidexia Townsend, Jr. N. Y. Ent. Soc., 20, 1912, 110 (type *S. clemonsi* new species); Ins. Insc. Mens., 4, 1916, 23.—Reinhard, Bul. Brk. Ent. Soc., 29, 1934, 150–54.

Spathidexia nexa n. sp.

Female.—Similar to *clemonsi* but the chitinized larvipositor distinctly wider and more tapering distally. Other minor distinctions are listed below.

Front at vertex 0.33 of head width; head pollen silvery on black background; frontalia deep brown, subequal width of one parafrontal, latter sparsely clothed with pale hairs; outer vertical differentiated but not very large, two proclinate orbitals and good-sized proclinate ocellars; one frontal below antennal base; parafacial bare, strongly narrowed below; vibrissae strong, on oral margin; facialia bare; antenna black, second segment reddish, about one-third length of third which also shows a reddish tinge at extreme base; arista black, short-haired nearly to tip; cheek about one-eighth eye height; palpus spatulate, reddish yellow; proboscis short; occiput thinly pale-haired.

Thorax and scutellum black, densely gray pollinose, notum not distinctly vittate; acrostichal 3, 3; dorsocentral 3, 3; presutural 1 (outer); sternopleural 1, 1; pteropleural 0; intraalar 3; supraalar 3; postalar 2; scutellum with 3 lateral, 1 apical and 1 discal pair; pleura wholly pale-haired; postnotal slope, propleuron and prosternum bare. Legs black tibiae with a slight reddish tinge in ground color; mid tibia with one anterodorsal bristle; claws and pulvilli small. Wing gray hyaline; veins brownish, third setulose about to middle of first posterior cell; latter open shortly before wing tip; cubitulus broadly curved without stump or fold; costal spine distinct; epaulet black; calypter white.

Abdomen shining black, last three segments with defined silvery pollen bands on about basal two-fifths; one pair of median marginal bristles on second segment and a complete row of stout bristles on hind edge of last two; chitinized retractile larvipositor shining black, about one-third wider than in *clemonsi*, grooved dorsally along median line and evenly narrowed distally to a blunt tip.

Length, 6.5 mm. Male unknown.

Holotype: Mexico City, D. F., Mexico, July 15, 1951 (W. G. Downs).

Genus *Lasioneura* Coquillett

Lasioneura Coquillett, Jr. N. Y. Ent. Soc., 3, 1895, 50 (type, *L. johnsoni* new species); Rev. Tach., 1897, 59.

Lasioneura dextella n. sp.

Male.—Very similar to *johnsoni* differing chiefly in having wholly black antennae and the legs largely so.

Male.—Front at vertex 0.33 of head width, with subgolden satiny pollen; cheek including lower extremity of parafacial pale gray; frontalia four or five times wider than one parafacial; two proclinate orbitals; outer verticals strong; frontals six to eight in a single row, one below antennal base; ocellars well developed; parafacial and parafacialia bare; vibrissae on oral margin; arista thickened to apical third or beyond, second segment slightly longer than wide; palpus yellow; haustellum rather slender, moderately elongate; back of head considerably bulged on lower extremity, sparsely pale-haired. Thorax and scutellum black, with thin yellowish gray pollen; three post dorsocentrals and three sternopleurals; scutellum with two lateral bristles, apicals and discals lacking. Legs black, trochanters reddish, hind coxa with a strong spine at apex below (similar to genotype in this respect); claws and pulvilli small.

Wing membrane with a light yellowish tinge; first vein setulose almost to tip and third nearly to small cross vein; first posterior cell open near wing tip; costal spine vestigial; calypter whitish tinged with yellow; epaulet black. Abdomen black above, sides of two basal segments and venter largely reddish in ground color; no discals, a row of marginals on last two and one pair of weak depressed median marginals on first two segments; genitalia as in *L. johnsoni*.

Length, 5.5 mm. Female unknown.

Holotype: El Zarco, Morelos, Mexico, Alt. 9,000 ft., September 3, 1950 (E. Bordas).

PUBLICATIONS RECEIVED

Plant Diseases in Orchard, Nursery and Garden Crops, by Ernst Gram & Anna Weber. Translated from Danish by Evelyn Ramsden and edited and adapted by R. W. G. Dennis of the Royal Botanic Gardens, Kew, England. 618 pp., 350 textfigures and 10 plates in color. 8 × 11½ ins., cloth bound. 1953. Philosophical Library, Inc., New York, N. Y. (Price, \$18.50.)

A Revision of the Scale-Insects of Florida, by G. B. Merrill. 143 pp., 112 textfigures. 6 × 9 ins., paper bound. 1953. Published by the State Plant Board of Florida, Gainesville, Florida.

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